

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,409 MW
Distillate	0 MW
Total TNB	2,409 MW
Total IPP	16,714 MW
Total Co-Gen	0 MW
Total System	21,823 MW

Generation Mix

Type	MWh	Percentage
Hydro	7,176	2.17 %
Gas	32,733	9.91 %
Total TNB	39,909	12.09 %
ST-Coal	229,683	69.55 %
LSS	2,735	0.83 %
Gas	58,334	17.66 %
Total IPP	290,752	88.05 %
Co-Gen	406	0.12 %
Total Co-Gen	406	0.12 %
Total Generation	331,067	100.25 %
PLTG	115	0.03 %
HVDC	726	0.22 %
Interconnection	841	0.25 %
Net Energy	330,226	100.00 %

Maximum Demand Record

Date: 4/18/2019	18,566 MW
Date: 4/18/2019	391,845 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	21:00:00 Hour
Total Set On Bus	17,172 MW
TNB Generation	2,242 MW
IPP Generation	13,320 MW
Spinning Reserve	1,547 MW
Maximum Demand	15,597 MW
Net Energy	330,226 MWH
Load Factor	88.22 %

Fuel Cost

Total Cost:	52,218,806.48 RM
Cost per Unit	15.77 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	422
Hydro	273
Syncon	914
Thermal	352
Total	1,961

Time Weather Temperature

Afternoon	Hot	35
Morning	Sunny	25

Hourly System MW Generation

	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
System Total	14850	14153	13696	13187	12839	12560	12549	12363	11700	12252	12978	13445	13628	13709	14125	14256	14378	14168	13824	14033	15393	15597	15415	15113

Gas Usage

Station	(mmscfd)
GLGR	31
TJGS	200
Total TNB	231
CBPS	5
KLPP	50
NPRI	77
PGLA	107
PLPS	53
YPKA	31
Total IPP	322
Total Gas	553
Total Gas Required	553

Alternate Fuel Usage

Station	(mmscfd)
Total	0

Daily MW Generation on Sunday

Station	Unit	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300																									
BSIA	HY03	12	12	13	12	13	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	12	12	12	12	12	13	13	13	12	12	24	24	24	24	24	24	24	24											
CEND	HY01	10	9	9	9	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9												
CEND	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
CEND	HY03	10	10	9	10	10	10	9	9	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9												
HTRG	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1												
HTRG	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1												
KNRG	HY02	26	26	27	26	27	27	26	26	26	26	26	26	27	26	27	26	27	27	27	27	27	27	27	26	24	24	24	23	23	35	35	35	35	35	35	35	36	36											
KNRG	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
KNYR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1												
KNYR	HY04	59	58	88	58	102	79	61	60	60	60	61	59	59	58	69	58	59	60	58	60	78	64	59	59	59	57	60	59	99	93	60	58	59	59	58	71	61	82	60	57	58	59	66	67	62	67	73	58	
LPIA	HY01	20	20	20	20	20	20	18	18	18	18	18	18	18	18	18	20	20	18	10	9	9	9	8	8	8	8	8	8	8	20	20	20	20	18	17	17	17	17	17	17	17	17	20	22	22				
MNOR	HY01	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	5	5	5	5	3	3	3	3	3	3	6	6	6	6	5	5	5	5			
PGAU	HY01	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	22	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
PGAU	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1				
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SIHY	HY02	30	30	30	50	50	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TMGR	HY01	31	31	31	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
TMGR	HY02	33	33	33	33	34	33	33	34	32	33	33	33	33	33	33	33	32	33	33	33	33	31	32	33	33	32	33	33	33	33	33	33	33	33	30	34	33	33	33	33	33	33	33	33	33	33	33		
TMGR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1		
UJLI	HY01	-1	-1	98	91	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
UPIA	HY01	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
UPIA	HY02	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Total Hydro		255	231	361	311	267	222	170	168	167	168	165	185	179	185	167	192	165	171	190	167	154	150	151	151	152	150	216	303	363	299	312	322	283	174	161	182	157	378	646	706	723	721	708	711	649	619			
Total Distillate		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	9	12	17	20	20	25	27	27	16	30	28	25	20	21	11	8	16	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	8	16	32	36	32	43	43	47	34	34	44	27	15	8	18	30	11	3	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	16	16	27	35	38	38	38	38	39	49	39	10	16	28	38	34	29	17	17	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	10	14	19	24	24	27	28	28	30	30	20	29	22	25	23	20	15	8	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	15	22	28	36	41	47	50	50	33	43	16	39	43	45	41	36	31	8	16	4	0	0	0	0	0	0	0	0	0	0	0	0	
JSLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	11	14	27	34	22	37	28	20	29	45	17	21	18	39	33	14	29	6	2	5	2	0	0	0	0	0	0	0	0	0	0		
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	13	22	23	34	36	40	43	24	50	42	43	48	29	41	10	33	27	24	7	4	2	0	0	0	0	0	0	0	0	0	0		
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	12	21	26	28	19	32	48	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50		
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	16	23	30	27	41	48	57	28	54	44	22	56	44	37	48	20	10	2	1	4	2	0	0	0	0	0	0	0	0	0	0	0	
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	14	18	21	31	36	32	43	43	45	45	11	43	41	39	14	21	23	5	4	3	1	0	0	0	0	0	0	0	0	0	0		
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	69	133	183	252	296	322	385	407	355	380	412	29																						

Daily MW Generation on Sunday

Station	Unit	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300																											
Interconnection		12	16	12	26	-15	-27	20	-25	16	58	38	15	-5	44	55	21	78	33	34	-4	48	-30	56	41	51	41	37	73	76	125	43	59	58	21	81	18	90	45	52	25	61	112	35	49	-6	-5	-18	43			
System Total		14850	14495	14153	13909	13696	13371	13187	12995	12839	12669	12560	12479	12549	12490	12363	11958	11700	12127	12252	12608	12978	13367	13445	13608	13628	13593	13709	13804	14125	14211	14256	14351	14378	14446	14168	14058	13824	13800	14033	14904	15393	15447	15597	15514	15415	15239	15113	14777			
SRev ST-Coal		136	246	379	390	447	480	471	472	472	477	489	498	490	501	646	652	772	644	570	517	470	468	528	539	464	524	511	518	281	402	295	300	406	387	396	387	395	389	395	185	158	181	177	207	155	139	236	254			
SRev OCGT-Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRev CCGT-Gas		375	336	230	321	374	558	277	512	628	742	861	956	942	932	734	1069	1085	1019	1156	989	799	659	535	629	738	776	698	698	242	250	449	359	286	260	391	352	612	685	737	510	306	238	176	143	236	237	191	289			
SRev ST-Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRev LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRev Co-Gen		73	76	74	75	74	74	74	72	75	74	75	74	73	76	75	76	76	71	72	73	75	71	76	74	75	71	73	73	74	75	72	72	75	72	73	73	76	74	72	20	19	19	19	19	19	19	19	19	39	72	
Syncon		1117	1268	1081	1168	1355	1355	1355	1355	1355	1355	1355	1355	1204	1204	1355	1064	1215	1053	1204	1204	1204	1017	1017	1017	1017	1017	1017	1017	1017	866	928	928	1029	1029	1029	878	1267	1267	1267	1267	1080	842	691	691	691	842	842	842	842		
Hydro		335	208	265	228	85	130	132	134	135	135	134	137	268	268	123	268	135	262	137	131	112	129	142	146	145	145	144	146	231	268	296	259	246	236	377	122	135	114	139	280	377	502	485	487	349	360	372	377			
S.Reserve Total		2036	2134	2029	2182	2335	2597	2309	2545	2665	2783	2914	3020	2977	2981	2933	3129	3283	3049	3139	2914	2660	2344	2298	2405	2439	2533	2443	2452	1694	1923	2040	2019	2042	1984	2115	2201	2485	2529	2610	2075	1702	1631	1548	1547	1601	1597	1680	1834			